

ABSTRACT

A process for producing lipids containing arachidonic acid comprising culturing a microorganism in which ω_3 desaturase activity has been decreased or is lacking at a temperature lower than the optimum growth temperature from the start of culturing or after culturing at the optimum growth temperature, said microorganism being obtained by the mutation treatment of a microorganism capable of producing arachidonic acid and belonging to the genus Mortierella and the like; and then recovering lipids containing arachidonic acid from the culture.